BOGUE INLET CHANNEL EROSION RESPONSE PROJECT
EMERALD ISLE, NORTH CAROLINA
ENVIRONMENTAL IMPACT STATEMENT SCOPING AND PDT MEETING ISSUES

		ISSUE PRESENTED/DISCUSSED											ISSUE ADDRESSED						
		MAY 29, 2002 PUBLIC FORUM MEETING	OCTOBER 29, 2002 SCOPING MEETING	DECEMBER 12, 2002 MEETING	FEBRUARY 4, 2003 MEETING	FEBRUARY 19, 2003 MEETING	APRIL 16, 2003 PDT MEETING	MAY 1, 2003 AGENCY MEETING	JUNE 11, 2003 PTE SITE VISIT & MEETING	JULY 1, 2003 SHELLFISH/SAV MEETING	SEPTEMBER 10, 2003 PDT MEETING	OCTOBER 15, 2003 PDT MEETING	BIOLOGICAL ASSESSMENT	ESSENTIAL FISH HABITAT DOCUMENT	CUMULATIVE EFFECTS ANALYSIS	CULTURAL RESOURCES REPORT	GEOTECHNICAL REPORT	ENGINEERING REPORT	ENVIRONMENTAL IMPACT STATEMENT
Project Rationale																			
1	What is the scope of the project and how much sand are we talking about? Quantify the objectives at The Point.		**P**														**X**	**X**	
2	Identify who "we" are protecting.		**P**										**X**						
3	Indicate the project needs (ie., beach nourishment, property protection, filling of the current channel, etc.).		**P**										**X**						
4	Define primary and secondary purpose of project (ie., not enough sand to close the channel).		**P**										**X**						
Concerns for Adjacent Habitats																			
1	Cumulative and secondary impacts when considering mitigation and planning.		**P**			**P**			**P**			**P**			**X**				
2	Evaluate effects on Habitat Areas of Particular Concern (HAPC).		**NP**											**X**					
3	Evaluate potential effects to Frazier's Creek and Hammocks Beach State Park.		**NP**																**X**
4	Indirect impacts to marshes (west end of Emerald Isle), seagrasses, shallow water habitats, and Dudley's Island bay scallops and hard clams.		**NP**								**P**								**X**
5	Erosion to shoal system and shorebird habitat, Bogue Banks, Bogue Inlet islands.		**NP**	**P**									**X**		**X**				
6	Comprehensive documentation of both positive and negative biological, ecological, and geographical effects.		**P**												**X**				
7	Ecological discussion and value of inlets on threatened and endangered species, including restoration of wildlife habitat (ie., turtles and piping plovers).		**NP**										**X**						
8	Cumulative environmental effects of inlet relocation, maintenance and renourishment on a local, statewide and/or federal basis.		**P**			**P**		**P**							**X**				**X**
9	Overview of inlet's potential to restrict zone of inlet migration resulting in creation of and reduction in habitat for rare and endangered species.		**NP**										**X**					**X**	
10	Concerned with warm season project impacts on nesting shorebirds and nesting sea turtles, especially during nourishment activities.		**NP**												**X**				**X**
11	Investigate funding for studies that document suitable habitat, future monitoring, and mitigation.		**NP**	**P**								**P**							**X**
12	Investigate mitigation and conservation ideas (include acquisition of private residences).		**NP**	**P**		**P**						**P**							**X**

BOGUE INLET CHANNEL EROSION RESPONSE PROJECT
EMERALD ISLE, NORTH CAROLINA
ENVIRONMENTAL IMPACT STATEMENT SCOPING AND PDT MEETING ISSUES

		ISSUE PRESENTED/DISCUSSED											ISSUE ADDRESSED						
		MAY 29, 2002 PUBLIC FORUM MEETING	OCTOBER 29, 2002 SCOPING MEETING	DECEMBER 12, 2002 MEETING	FEBRUARY 4, 2003 MEETING	FEBRUARY 19, 2003 MEETING	APRIL 16, 2003 PDT MEETING	MAY 1, 2003 AGENCY MEETING	JUNE 11, 2003 PTE SITE VISIT & MEETING	JULY 1, 2003 SHELLFISH/SAV MEETING	SEPTEMBER 10, 2003 PDT MEETING	OCTOBER 15, 2003 PDT MEETING	BIOLOGICAL ASSESSMENT	ESSENTIAL FISH HABITAT DOCUMENT	CUMULATIVE EFFECTS ANALYSIS	CULTURAL RESOURCES REPORT	GEOTECHNICAL REPORT	ENGINEERING REPORT	ENVIRONMENTAL IMPACT STATEMENT
Concerns for Adjacent Habitats (Cont.)																			
13	Characterize habitats (include numbers and acreage of resource areas).					**NP**	**NP**				**P**								**X**
14	Differentiate between positive and negative effects from project the project vs. naturally occurring effects								**P**										**X**
Fisheries																			
1	Direct and indirect impacts on nearshore spawning and fish larval transport in Bogue Inlet.		**NP**									**p**		**X**					
2	Study impacts on anadromous fish in the White Oak River.		**NP**											**X**					
3	Identify positive and negative, direct and indirect impacts on fish nursery areas and fishery resources.		**NP**											**X**					
4	Address impacts to Essential Fish Habitat.		**NP**				**P**							**X**					
5	Mitigating losses to shallow water habitat, specifically fishery habitats.		**NP**											**X**					**X**
6	Impacts of sand deposits on estuarine system and fishing industry.		**NP**																**X**
7	Address how fish passage will be affected by dike closure			**P**										**X**					
8	Groundtruth SAV and shellfish areas							**P**		**P**									**X**
Birds																			
1	Potential impacts on accretion and erosion of shoals and shorebird habitat (including Island No. 2)		**P**	**P**											**X**				
2	Identify direct and indirect impacts on nesting, migrating, and over wintering birds, including piping plovers.		**P**										**X**		**X**				
3	Identify cumulative impacts to birds, including shorebird habitat.		**NP**												**X**				
4	Address whole area for impacts to piping plover with losses from new inlet versus the gain of closing the old inlet.		**NP**																**X**
5	EIS should investigate other possible alignments east and west of the currently proposed alignment to lessen possible impacts to piping plover habitat.		**NP**																**X**
6	Investigate using the extra sand for additional piping plover habitats.		**NP**																**X**
7	Once sandbags have been removed, will access to protected birds be more available to clearly identify the bird nests?		**NP**																**X**
8	Concerned about "Bogue Inlet Shoal" sand loss and NC Wildlife Resource Commission owned Island No. 2 (per CSW report) for piping plover habitat and other shorebirds.		**NP**														**X**	**X**	

BOGUE INLET CHANNEL EROSION RESPONSE PROJECT
EMERALD ISLE, NORTH CAROLINA
ENVIRONMENTAL IMPACT STATEMENT SCOPING AND PDT MEETING ISSUES

	ISSUE PRESENTED/DISCUSSED											ISSUE ADDRESSED						
	MAY 29, 2002 PUBLIC FORUM MEETING	OCTOBER 29, 2002 SCOPING MEETING	DECEMBER 12, 2002 MEETING	FEBRUARY 4, 2003 MEETING	FEBRUARY 19, 2003 MEETING	APRIL 16, 2003 PDT MEETING	MAY 1, 2003 AGENCY MEETING	JUNE 11, 2003 PTE SITE VISIT & MEETING	JULY 1, 2003 SHELLFISH/SAV MEETING	SEPTEMBER 10, 2003 PDT MEETING	OCTOBER 15, 2003 PDT MEETING	BIOLOGICAL ASSESSMENT	ESSENTIAL FISH HABITAT DOCUMENT	CUMULATIVE EFFECTS ANALYSIS	CULTURAL RESOURCES REPORT	GEOTECHNICAL REPORT	ENGINEERING REPORT	ENVIRONMENTAL IMPACT STATEMENT
Turtles																		
1 Examine project effects on turtles.		**NP**										X		X				X
2 Define beach compatible sand material then establish baseline. Compatibility should identify type of material, size, color and temperature.		**NP**															X	X
3 Identify the potential of the effects of dredge operations on sea turtles.		**NP**												X				X
4 Identify the need or lack of need for beach renourishment. Discuss impacts from nourishment activities along west end of Emerald Isle.		**NP**		**NP**													X	X
5 Quality specifications for the sand disposal operations. Ensure that appropriate engineering standards area implemented.		**NP**															X	
6 How will the beach be maintained?		**NP**																X
7 Identify regional trends						**NP**								X				
Macroinvertebrates																		
1 Implement a macroinvertebrate study.		**NP**										X						
2 Ensure that macroinvertebrate studies are conducted seasonally not annually pre- and post-construction.		**NP**										X						
3 Impacts on invertebrates from unnatural sand material.		**NP**												X				
Water Quality																		
1 Identify the potential effects on water quality in outstanding resource waters, specifically salinity and tidal changes.		**P**		**P**				**P**						X				
2 Provide a model to identify changes in flow and salinity.		**NP**										X				X		
3 Turbidity levels not to exceed 25 NTU (use turbidity curtain around sand dike deposition area), otherwise a variance may be required.			**P**							**P**								X
Channel Design Issues																		
1 Study littoral transport of sand across the bar for the three proposed depths.		**NP**														X	X	X
2 Address closure of existing channel. How will the existing channel be effectively closed?		**NP**										X						X
3 Use similar cross-section for new channel as existing to maintain tidal prism.		**NP**										X				X	X	X
4 Don't narrow channel – widen and deepen all the way.		**NP**										X				X	X	X

BOGUE INLET CHANNEL EROSION RESPONSE PROJECT
EMERALD ISLE, NORTH CAROLINA
ENVIRONMENTAL IMPACT STATEMENT SCOPING AND PDT MEETING ISSUES

		ISSUE PRESENTED/DISCUSSED											ISSUE ADDRESSED						
		MAY 29, 2002 PUBLIC FORUM MEETING	OCTOBER 29, 2002 SCOPING MEETING	DECEMBER 12, 2002 MEETING	FEBRUARY 4, 2003 MEETING	FEBRUARY 19, 2003 MEETING	APRIL 16, 2003 PDT MEETING	MAY 1, 2003 AGENCY MEETING	JUNE 11, 2003 PTE SITE VISIT & MEETING	JULY 1, 2003 SHELLFISH/SAV MEETING	SEPTEMBER 10, 2003 PDT MEETING	OCTOBER 15, 2003 PDT MEETING	BIOLOGICAL ASSESSMENT	ESSENTIAL FISH HABITAT DOCUMENT	CUMULATIVE EFFECTS ANALYSIS	CULTURAL RESOURCES REPORT	GEOTECHNICAL REPORT	ENGINEERING REPORT	ENVIRONMENTAL IMPACT STATEMENT
Channel Design Issues Cont'd																			
5	Identify the beneficial use of the dredged material from the inlet (compare to offshore borrow areas).		**NP**				**NP**												**X**
6	Explain the rationale for the proposed channel design, its size and its affect on flow velocity. To what degree will moving channel have impact on inlet (size, tides, salinity, etc).		**NP**		**NP**								**X**				**X**	**X**	**X**
7	Analyze the ideal depth		**P**										**X**				**X**	**X**	**X**
8	Explain the priority given for the use of the dredged sand material.		**NP**										**X**						**X**
9	Provide a more detailed search on the inlet's migration.		**NP**										**X**				**X**	**X**	**X**
10	Develop a protocol for sand bag removal.		**NP**																
11	Justify the proposed 13 foot depth.		**NP**										**X**				**X**	**X**	**X**
12	Ensure that the study clearly identifies the Intent of the Inlet vs. the Channel relocation		**NP**																**X**
13	What are the cumulative environmental effects of the inlet relocation and renourishment on a federal, state and local basis?		**NP**		**P**										**X**				
14	Address maintenance dredging impacts			**P**											**X**				**X**
15	Where is the zone of influence			**P**													**X**	**X**	**X**
16	Address shoreline positions and erosion rates			**P**							**P**	**P**	**X**				**X**	**X**	**X**
17	Investigate alternative uses of jetty and spoil from dredge islands. Discuss project alternatives (no action, sandbags, terminal groin)		**NP**		**P**														**X**
Channel Maintenance Issues																			
1	Deposit maintenance spoil on down-drift shore versus up-drift shore.		**P**																**X**
2	Use hopper dredge as primary method of channel maintenance and evaluate its effectiveness.		**NP**																**X**
3	Ensure that future dredging puts sand back on beach.		**P**																**X**
4	Describe/provide ongoing stabilization efforts by dredging methods.		**NP**				**NP**												**X**
5	Maintain the federal channel depth at 8 feet.		**P**																
6	Can the inlet be maintained to handle boats drawing 6 to 10 feet of water? What will be the dimensions of the maintained channel?		**NP**																**X**
7	Provide upfront guidelines for maintaining channel location (ie., frequency, implementation, magnitude, etc).		**NP**																**X**

BOGUE INLET CHANNEL EROSION RESPONSE PROJECT
EMERALD ISLE, NORTH CAROLINA
ENVIRONMENTAL IMPACT STATEMENT SCOPING AND PDT MEETING ISSUES

		ISSUE PRESENTED/DISCUSSED											ISSUE ADDRESSED						
		MAY 29, 2002 PUBLIC FORUM MEETING	OCTOBER 29, 2002 SCOPING MEETING	DECEMBER 12, 2002 MEETING	FEBRUARY 4, 2003 MEETING	FEBRUARY 19, 2003 MEETING	APRIL 16, 2003 PDT MEETING	MAY 1, 2003 AGENCY MEETING	JUNE 11, 2003 PTE SITE VISIT & MEETING	JULY 1, 2003 SHELLFISH/SAV MEETING	SEPTEMBER 10, 2003 PDT MEETING	OCTOBER 15, 2003 PDT MEETING	BIOLOGICAL ASSESSMENT	ESSENTIAL FISH HABITAT DOCUMENT	CUMULATIVE EFFECTS ANALYSIS	CULTURAL RESOURCES REPORT	GEOTECHNICAL REPORT	ENGINEERING REPORT	ENVIRONMENTAL IMPACT STATEMENT
Channel Maintenance Issues Cont'd																			
8	Long-term management after channel realignment, who is responsible for input from all interested parties to ensure no problems arise (ie., additional impacts).		**NP**																**X**
9	Set up a management organization to ensure that Bogue Inlet to the Atlantic Intracoastal Waterway inlet and depth is maintained.		**NP**																
10	What is the life expectancy of the project? Will it stay in place?		**P**		**NP**		**NP**										**X**	**X**	**X**
11	Who will pay for the channel maintenance once the project is completed and how will it be maintained?		**NP**																
12	What about sandbag removal?		**NP**																**X**
Economic, Recreational, Commercial, Public Interest and Safety Issues																			
1	Investigate the potential for violations under the existing EIS and public access issues under the Corps of Engineers and Division of Coastal Management permits.		**P**																
2	Will the new channel allow for commercial boat access? Will it allow for commercial and/or recreational boating year round? Emergency access?		**NP**																**X**
3	Describe the economic benefit of deepening the inlet to allow boats out of Bogue, rather than traveling up to Beaufort Inlet and back down to the oceanfront to Bogue Inlet.		**NP**																**X**
4	Provide information on boating safety in the area.		**NP**																**X**
5	Provide and distribute an informational brochure that addresses usage of inlet and indicates the importance of the new inlet both commercially and recreationally.		**NP**																
6	Study the effects of the relocated inlet on adjacent houses, infrastructure and property reclamation. Will there be a loss of property or tax values?		**NP**																**X**
7	Property and infrastructure loss at The Pointe and Wind Tree Drive.		**NP**										**X**				**X**	**X**	**X**
8	What will the cost of the project be for the tax payers? Include cost analysis		**P**		**P**														**X**
9	Could this project result in more or additional development at tip of the island?		**P**																**X**
10	How will the ownership of accreted land be determined?		**P**	**P**			**P**					**P**							**X**
11	Ensure public access to renourised beach area. What will be the State and Federal obligations for the public access area?		**P**				**NP**					**P**							**X**

BOGUE INLET CHANNEL EROSION RESPONSE PROJECT
EMERALD ISLE, NORTH CAROLINA
ENVIRONMENTAL IMPACT STATEMENT SCOPING AND PDT MEETING ISSUES

		ISSUE PRESENTED/DISCUSSED											ISSUE ADDRESSED						
		MAY 29, 2002 PUBLIC FORUM MEETING	OCTOBER 29, 2002 SCOPING MEETING	DECEMBER 12, 2002 MEETING	FEBRUARY 4, 2003 MEETING	FEBRUARY 19, 2003 MEETING	APRIL 16, 2003 PDT MEETING	MAY 1, 2003 AGENCY MEETING	JUNE 11, 2003 PTE SITE VISIT & MEETING	JULY 1, 2003 SHELLFISH/SAV MEETING	SEPTEMBER 10, 2003 PDT MEETING	OCTOBER 15, 2003 PDT MEETING	BIOLOGICAL ASSESSMENT	ESSENTIAL FISH HABITAT DOCUMENT	CUMULATIVE EFFECTS ANALYSIS	CULTURAL RESOURCES REPORT	GEOTECHNICAL REPORT	ENGINEERING REPORT	ENVIRONMENTAL IMPACT STATEMENT
Economic, Recreational, Commercial, Public Interest and Safety Issues Cont'd																			
12	Address the septic problems for the west end of Emerald Isle if the inlet is not relocated and The Pointe floods.		NP																
13	Are State funds available for public access (NCGS 113A-134.3)?		NP																
14	Need state lands to be cognizant of beach nourishment resulting in any new regulations addressing beach development (ie., setbacks etc.).		NP																X
15	Construction should occur outside of the summer months, when the inlet is heavily used.		NP										X		X				X
16	Address recreational values (ie., fishing in Bogue Inlet)						NP	NP											X
Project Maps																			
1	Concerns about baseline photography.		NP							P					X				X
2	Include Permit and Project Area maps						P								X				X
3	Include boundary of Coastal Inlet Management Hazard line (show on Permit Area Plan)							P	P										X
Other Issues																			
1	Examine manatee impacts if dredging occurs between June 1 and Nov. 1		NP										X		X				X
2	Full disclosure and addressing of concerns as early as possible by all parties.		P								P	P	X	X	X		X	X	X
3	Include alternatives (relocated houses and habitat restoration of abandoned lots; alternative channel dimensions; opening of the USCG Channel)			P															X
4	Discuss accuracy of measurements (data collection)				P														X
5	Include Seabeach Amaranth data							NP					X		X				X
6	Establish amount of time for dredge in water during construction (60 days). Incorporate contingencies for weather during construction (ie., remove dredge, how is channel "plugged")					P							X		X				X
Reference Projects																			
1	Identify any reference projects that might exist.		NP																X
2	Corps should utilize lessons learned from the relocation of Mason Inlet to this proposed project.		NP											X					X

P = Project Related Issue
NP = Non-Project Related Issue
X = Addressed in Document